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10/814,335	04/01/2004	Gregory Plos	05725.1314-00	5330

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EXAMINER

ELHILO, EISA B

ART UNIT PAPER NUMBER

1751

DATE MAILED: 05/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/814,335

**Applicant(s)**

PLOS ET AL.

**Examiner**

Eisa B. Elhilo

**Art Unit**

1751

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☐ Claim(s) 1-51 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 9-51 is/are rejected.
- 7) ☒ Claim(s) 7 and 8 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

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Claims 1-51 are pending in this application.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6, 9-20 and 22-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsunaga et al. (US 2001/0054206 A1) in view of Laurent et al. (US 2002/0046431 A1).

Matsunaga et al. (US' 206 A1) teaches a hair dyeing composition comprising a fluorescent of azomethine compound of a formula (2) as claimed in claims 1 and 5-6 (see page 1, formula (2)), wherein the fluorescent compound is presented in the composition in the amounts of 0.01 to 20%, 0.05 to 10% or 0.1 to 5% as claimed in claims 9-11 (see pages 2-3, paragraph, 0016), wherein the composition further comprises cationic polymers (see page 3, paragraph, 0024), anionic surfactants in the amount of 2% as claimed in claims 16-17 (see page 3, paragraph, 0025 and page 5, Example 13), para-phenylenediamine as an oxidation base in the amount of 0.5 to 10% by weight as claimed in claims 22-23 (see page 3, paragraph, 0020 and paragraph, 0022), m-phenylenediamine as a coupler in the amount of 0.5 to 10% as claimed in claims 25-26 (see page 3, paragraphs, 0021 and 0022), oxidizing agent of hydrogen peroxide, perborates and laccase (four electron oxidoreductase) enzyme as claimed in claims 24 and 27-31 (see page 3, paragraphs, 0018-0019). Matsunaga et al. (US' 206 A1) also teaches a process for

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dyeing hair comprising applying to the hair the dyeing composition as described above and wherein the dyeing composition is applied to the hair after mixing with the oxidizing composition as claimed in claims 32, 35-37 and 43 (see page 3, paragraphs, 0026 and 0027). Matsunaga et al. (US' 206 A1) further teaches and discloses a multi-compartment device for dyeing hair as claimed in claims 48-51 (see page 3, paragraph, 0026).

The instant claims differ from the reference by reciting a composition comprising at least one cationic polymer with a charge density of at least 1 meq/g as claimed.

However, Matsunaga et al. (US' 206 A1) suggests the use of cationic polymers in the hair dyeing composition (see page 3, paragraph, 0024).

Laurent et al. (US 2002/0046431 A1) in analogous art of hair dyeing formulation, teaches a dyeing composition comprising cationic polymers as claimed in claims 12-13 (see pages 13-14, paragraphs, 0324 and page 15, paragraph, 0349), wherein the cationic polymers presented in the composition in the amounts of 0.01 to 10% and 0.1 to 3% by weight, which within the claimed percentage ranges as claimed in claims 14-15 (see page 17, paragraph, 0396). Laurent et al. also teaches direct dyes (non-fluorescent direct dyes) such as anthraquinone and azo dyes as claimed in claims 18-19 (see page, 13, paragraph, 0317) and wherein the direct dyes are presented in the amounts of 0.01 to 10% which within the claimed range as claimed in claim 20 (see page 13, paragraph, 0317).

Therefore, in view of the teaching of the secondary reference, one having ordinary skill in the art at the time the invention was made would be motivated to modify the composition of Matsunaga (US' 206 A1) by incorporating cationic polymers and direct dyes as taught by Laurent et al. (US' 431 A1) to make such a composition. Such a modification would be obvious

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because the primary reference of Matsunaga et al. (US' 206 A1) suggests the use of cationic polymers in the dyeing composition (see page, 3, paragraph, 0024) and also suggests the use of direct dyes in the dyeing composition (see page 2, paragraph, 0015 and page 3, paragraph, 0023). Laurent et al. (US' 431 A1) as a secondary reference clearly teaches and discloses the cationic polymers, and direct dyes in the claimed amounts, and, thus, a person of the ordinary skill in the art would be motivated to incorporate cationic polymers and direct dyes as taught by Laurent et al. (US' 431 A1) in the dyeing composition of Matsunaga (US' 206 A1) with a reasonable expectation of success for improving the dyeing properties of the composition and would expect such a composition to have similar properties to those claimed, absent unexpected results.

2 With respect to claims 2-4, 33-34, 38 -42 and 44-47, it would have been obvious to one having ordinary skill in the art at the time the invention was made to formulate a dyeing composition comprising a fluorescent dye that provides maximum reflectance as claimed and wherein the composition can be applied to skin or different type of hair as claimed because the combined references of Matsunaga et al. and Laurent et al., teach and disclose the claimed components of fluorescent dye and cationic polymers, and thus, a person of the ordinary skill in the art would expect such a composition to have similar properties physical properties including reflectance and wherein the composition can be applied to different hair types as claimed, absent unexpected results.

3 Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsunaga et al. (US 2001/0054206 A1) in view of Laurent et al. (US 2002/0046431 A1) and further in view of Giuseppe et al. (US 5,744,127).

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The disclosures of Matsunaga (US' 206 A1) and Laurent et al. (US' 431 A1) as described above, do not teach or disclose dyeing compositions in forms of dyeing shampoos as claimed.

However, Matsunaga et al. (US' 206 A1) clearly teaches that no particular limitation is imposed on the form of the hair dyeing composition (see page 3, paragraph, 0027).

Giuseppe et al. (US' 127) in other analogous art of hair treating formulation, teaches a composition formulated as a hair shampoo and hair dyeing as well (see col. 6, lines 5-6).

Therefore, in view of the teaching of the secondary reference, one having ordinary skill in the art at the time the invention was made would be modified to formulate the dyeing composition of Matsunaga et al. in a shampoo form as taught by Giuseppe et al. to arrive at the claimed composition. Such a modification would be obvious because Giuseppe et al. clearly teaches that the dyeing composition can be formulated in a shampoo form, and, thus, one having ordinary skill in the art would be motivated to formulate the dyeing composition in any form including the shampoo form, and would expect such a composition to have similar properties to those claimed, absent unexpected results.

#### ***Allowable Subject Matter***

4 Claims 6-7 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art of record do not teach or disclose a hair dyeing composition comprising fluorescent of the claimed formula (F3).

#### **Conclusion**

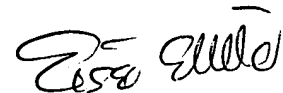
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eisa B. Elhilo whose telephone number is (571) 272-1315. The

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examiner can normally be reached on M - F (8:00 -5:30) with alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas McGinty can be reached on (571) 272-1029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Eisa Elhilo  
Primary Examiner  
Art Unit 1751

May 22, 2006